$^{134}_{60}$Nd

Δ: (–75800) **S_n:** (11400) **S_p:** (5000)
Q_{EC}: 2770 *150* **Q_α:** (1300)

Nuclear Bands

- *A* Band Structure
- *B* Band Structure
- *C* γ band
- *D* Band Structure
- *E* Band Structure
- *F* SD-1 band (94Pe16,96Pe10)
- *G* GS band
- *H* SD-2 band (94Pe16,96Pe10)

Levels and γ-ray branchings:

G **0**, 0^+, 8.5 *15* m, %EC+%β^+=100

G **294.30** *16*, 2^+, 64 *4* ps, μ=+1.23 *36*
γ_0***294.2*** *2* (†$_\gamma$100) E2

C **753.73** *16*, (2^+) γ_{294}***459.3*** *2* (†$_\gamma$90 *10*)
γ_0***753.8*** *2* (†$_\gamma$100 *10*)

G **788.97** *21*, 4^+, <3.5 ps γ_{294}***494.7*** *2* (†$_\gamma$100) E2

C **1089.02** *21*, (3^+) γ_{754}***335.3*** *3* (†$_\gamma$24 *5*)
γ_{294}***794.7*** *2* (†$_\gamma$100 *8*)

C **1313.01** *21*, (4^+) γ_{789}***523.8*** *2* (†$_\gamma$52 *10*)
γ_{754}***559.2*** *2* (†$_\gamma$100 *15*)
1383.8 *4* γ_{789}***594.7*** *4* (†$_\gamma$60 *26*)
γ_0***1384.0*** *5* (†$_\gamma$100 *30*)

G **1420.10** *25*, 6^+, <9 ps γ_{789}***631.3*** *2* (†$_\gamma$100) E2
1605.0 *3* γ_{1089}***516.0*** *3* (†$_\gamma$100 *14*)
γ_{754}***851.3*** *3* (†$_\gamma$34 *7*)
1669.3 *6* γ_{294}***1375.0*** *5* (†$_\gamma$100)
1670.9 *5* γ_{789}***881.9*** *4* (†$_\gamma$100)

C **1697.6** *4*, (5^+) γ_{1089}***608.6*** *3* (†$_\gamma$100)

C **1910.6** *3*, (6^+) γ_{1420}***491*** *1* (†$_\gamma$<20)
γ_{1313}***597.3*** *2* (†$_\gamma$100 *10*)

B **1956.2** *3*, (5^-) γ_{789}***1167.3*** *2* (†$_\gamma$100) (E1)
2036.4 *5* γ_{789}***1247.4*** *4* (†$_\gamma$100)

G **2126.5** *3*, 8^+ γ_{1420}***706.4*** *2* (†$_\gamma$100) E2
2231.6 *6* γ_{789}***1442.6*** *5* (†$_\gamma$100)
2293.1 *4*, $(8)^-$, 410 *30* μs, %IT=100
γ_{2127}***166.5*** *3* (†$_\gamma$100 *7*) E1 γ_{1420}***874*** (†$_\gamma$7 *2*)

B **2340.6** *3*, (7^-) γ_{1956}***384.6*** *2* (†$_\gamma$34 *5*) (E2)
γ_{1420}***920.4*** *2* (†$_\gamma$100 *2*) (E1)

A **2412.5** *3*, (6^-) γ_{1956}***457*** γ_{1420}***992.4*** *2* (†$_\gamma$100)

C **2467.2** *3*, (8^+) γ_{1911}***556.3*** *2* (†$_\gamma$100 *7*)
γ_{1420}***1047.3*** *2* (†$_\gamma$95 *9*)

A **2728.5** *3*, (8^-) γ_{2413}***316.0*** *2* (†$_\gamma$33 *5*) (E2)
γ_{2341}***387.9*** *2* (†$_\gamma$100 *11*) D

G **2816.9** *4*, 10^+, 9.0 *14* ps, μ≈0
γ_{2127}***690.4*** *2* (†$_\gamma$100) E2

B **2840.7** *4*, (9^-) γ_{2341}***500.1*** *2* (†$_\gamma$100) (E2)
γ_{2127}***714***

C **3052.0** *3*, (10^+) γ_{2467}***584.7*** *2* (†$_\gamma$100 *7*)
γ_{2127}***925.6*** *2* (†$_\gamma$100 *10*) (E2)

A **3200.2** *4*, (10^-) γ_{2729}***471.7*** *2* (†$_\gamma$100) (E2)

E **3436.5** *4*, (12^+) γ_{3052}***384.6*** *2* (†$_\gamma$83 *4*) (E2) γ_{2817}***619.5*** *2* (†$_\gamma$100 *6*)

B **3453.0** *4*, (11^-) γ_{2841}***612.3*** *2* (†$_\gamma$100) (E2)

G **3483.0** *4*, 12^+ γ_{2817}***666.0*** *2* (†$_\gamma$100) E2

A **3863.0** *5*, (12^-) γ_{3200}***662.8*** *2* (†$_\gamma$100) (E2)

E **4028.2** *4*, (14^+) γ_{3483}***545*** γ_{3437}***591.7*** *2* (†$_\gamma$100) (E2)

B **4175.4** *5*, (13^-) γ_{3453}***722.4*** *2* (†$_\gamma$100) (E2)

G **4183.7** *5*, 14^+ γ_{3483}***700.7*** *2* (†$_\gamma$100) E2

A **4607.5** *5*, (14^-) γ_{3863}***744.5*** *2* (†$_\gamma$100) (E2)

E **4776.7** *5*, (16^+) γ_{4028}***748.5*** *2* (†$_\gamma$100) (E2)

G **4942.7** *5*, 16^+ γ_{4184}***759.0*** *2* (†$_\gamma$100) E2

B **4947.9** *5*, (15^-) γ_{4175}***772.5*** *2* (†$_\gamma$100) (E2)

A **5345.9** *5*, (16^-) γ_{4608}***738.4*** *2* (†$_\gamma$100) (E2)

E **5629.7** *11*, (18^+) γ_{4777}***853*** *1* (†$_\gamma$100) (E2)

B **5711.0** *6*, (17^-) γ_{4948}***763.1*** *2* (†$_\gamma$100)

G **5777.7** *11*, 18^+ γ_{4943}***835*** *1* (†$_\gamma$100) E2

A **6082.5** *6*, (18^-) γ_{5346}***736.6*** *2* (†$_\gamma$100)

F **6300.2** *10*, (17^-) γ_{4943}***1357.5*** (†$_\gamma$0.04 *3*)

B **6488.0** *12*, (19^-) γ_{5711}***777*** (†$_\gamma$100)

E **6531.7** *15*, (20^+) γ_{5630}***902*** (†$_\gamma$100)

G **6712.6** *15*, 20^+ γ_{5778}***935*** (†$_\gamma$100) E2

H **6831.4** *10*, (18^+) γ_{4943}***1889*** (†$_\gamma$0.17 *5*)

A **6893.5** *12*, (20^-) γ_{6083}***811*** (†$_\gamma$100)

D **6961.5** (?), (19^-) γ_{5630}***1331.9***
6965.5 (?), (19^-) γ_{5630}***1336.3***

F **6968.2** *10*, (19^-) γ_{6300}***667.9*** *5* (†$_\gamma$0.10 *5*)
E2 $I^{(1)}$=54.2, $I^{(2)}$=61.2, ħω=0.350
γ_{5630}***1338.6*** (†$_\gamma$0.27 *3*)

B **7358.0** *15*, (21^-) γ_{6488}***870*** (†$_\gamma$100)

E **7467.7** *18*, (22^+) γ_{6532}***936*** (†$_\gamma$100)

H **7557.7** *10*, (20^+) γ_{6831}***726.4*** (†$_\gamma$0.32 *5*)
$I^{(1)}$=53.6, $I^{(2)}$=103.4, ħω=0.373
γ_{5778}***1780*** (†$_\gamma$0.12 *4*) γ_{5630}***1928*** (†$_\gamma$0.10 *3*)

F **7701.5** *10*, (21^-) γ_{6968}***733.3*** *3* (†$_\gamma$0.37 *5*)
E2 $I^{(1)}$=54.5, $I^{(2)}$=53.5, ħω=0.385
γ_{6966}***736*** γ_{6962}***740***

G **7749.6** *18*, (22^+) γ_{6713}***1037*** (†$_\gamma$100)

A **7808.5** *16*, (22^-) γ_{6894}***915*** (†$_\gamma$100)

H **8322.8** *10*, (22^+) γ_{7558}***765.1*** (†$_\gamma$0.60 *5*)
$I^{(1)}$=55.5, $I^{(2)}$=71.0, ħω=0.397

B **8332** *2*, (23⁻) γ_{7358}***974*** (†$_\gamma$100)

E **8453.7** *21*, (24⁺) γ_{7468}***986*** (†$_\gamma$100)

F **8509.6** *10*, (23⁻) γ_{7702}***808.1*** *2* (†$_\gamma$1.00 *5*)
E2 $I^{(1)}$=*54.6*, $I^{(2)}$=*58.4*, ħω=*0.421*

A **8818.5** *19*, (24⁻) γ_{7809}***1010*** (†$_\gamma$100)

G **8874.6** *21*, (24⁺) γ_{7750}***1125*** (†$_\gamma$100)

H **9144.2** *15*, (24⁺) γ_{8323}***821.4*** *3* (†$_\gamma$0.78 *3*)
E2 $I^{(1)}$=*55.8*, $I^{(2)}$=*51.8*, ħω=*0.430*

B **9378** *2*, (25⁻) γ_{8332}***1046*** (†$_\gamma$100)

F **9386.2** *10*, (25⁻) γ_{8510}***876.6*** *2* (†$_\gamma$1.00 *5*)
E2 $I^{(1)}$=*55.0*, $I^{(2)}$=*61.0*, ħω=*0.455*

E **9501.7** *23*, (26⁺) γ_{8454}***1048*** (†$_\gamma$100)

A **9904.5** *20*, (26⁻) γ_{8819}***1086***

H **10042.8** *15*, (26⁺) γ_{9144}***898.6*** *2* (†$_\gamma$1.00 *2*)
E2 $I^{(1)}$=*55.6*, $I^{(2)}$=*54.3*, ħω=*0.468*

G **10067.6** *23*, (26⁺) γ_{8875}***1193*** (†$_\gamma$100)

F **10328.4** *10*, (27⁻) γ_{9386}***942.2*** *2* (†$_\gamma$1.00)
$I^{(1)}$=*55.4*, $I^{(2)}$=*61.3*, ħω=*0.487*

B **10344** *2*, (27⁻) γ_{9378}***966***

E **10616.7** *25*, (28⁺) γ_{9502}***1115*** (†$_\gamma$100)

H **11015.1** *15*, (28⁺) γ_{10043}***972.3*** *2*
(†$_\gamma$0.93 *5*) $I^{(1)}$=*55.6*, $I^{(2)}$=*56.5*, ħω=*0.504*

A **11053.5** *20*, (28⁻) γ_{9905}***1149***

G **11301.6** *25*, (28⁺) γ_{10068}***1234***

F **11335.8** *10*, (29⁻) γ_{10328}***1007.4*** *2*
(†$_\gamma$1.02 *4*) $I^{(1)}$=*55.7*, $I^{(2)}$=*59.3*, ħω=*0.521*

B **11371** *2*, (29⁻) γ_{10344}***1027***

E **11790** *3*, (30⁺) γ_{10617}***1173*** (†$_\gamma$100)

H **12058.2** *15*, (30⁺) γ_{11015}***1043.1*** *2*
(†$_\gamma$0.85 *5*) $I^{(1)}$=*55.8*, $I^{(2)}$=*63.5*, ħω=*0.537*

A **12250.5** *20*, (30⁻) γ_{11054}***1197***

F **12410.6** *15*, (31⁻) γ_{11336}***1074.8*** *3*
(†$_\gamma$0.71 *5*) $I^{(1)}$=*55.9*, $I^{(2)}$=*58.0*, ħω=*0.555*

B **12474** *2*, (31⁻) γ_{11371}***1103***

G **12571.6** *25*, (30⁺) γ_{11302}***1270***

E **12971** *3*, (32⁺) γ_{11790}***1181***

H **13164.3** *15*, (32⁺) γ_{12058}***1106.1*** *3*
(†$_\gamma$0.80 *6*) $I^{(1)}$=*56.5*, $I^{(2)}$=*76.2*, ħω=*0.566*

F **13554.4** *15*, (33⁻) γ_{12411}***1143.8*** *3*
(†$_\gamma$0.49 *5*) $I^{(1)}$=*55.9*, $I^{(2)}$=*55.4*, ħω=*0.590*

B **13655** *2*, (33⁻) γ_{12474}***1181***

E **14155** *3*, (34⁺) γ_{12971}***1184***

H **14322.9** *15*, (34⁺) γ_{13164}***1158.6*** *3*
(†$_\gamma$0.67 *6*) $I^{(1)}$=*57.4*, $I^{(2)}$=*77.7*, ħω=*0.592*

F **14770.4** *15*, (35⁻) γ_{13554}***1216.0*** *4*
(†$_\gamma$0.47 *6*) $I^{(1)}$=*55.9*, $I^{(2)}$=*54.1*, ħω=*0.626*

B **14916** *2*, (35⁻) γ_{13655}***1261***

E **15408** *3*, (36⁺) γ_{14155}***1253***

H **15533.0** *15*, (36⁺) γ_{14323}***1210.1*** *5*
(†$_\gamma$0.47 *8*) $I^{(1)}$=*58.1*, $I^{(2)}$=*68.0*, ħω=*0.620*

F **16060.3** *15*, (37⁻) γ_{14770}***1289.9*** *6*
(†$_\gamma$0.37 *5*) $I^{(1)}$=*55.7*, $I^{(2)}$=*51.7*, ħω=*0.664*

B **16260** *2*, (37⁻) γ_{14916}***1344***

E **16733** *3*, (38⁺) γ_{15408}***1325***

H **16801.9** *15*, (38⁺) γ_{15533}***1268.9*** *5*
(†$_\gamma$0.41 *8*) $I^{(1)}$=*58.1*, $I^{(2)}$=*52.5*, ħω=*0.653*

F **17427.6** *20*, (39⁻) γ_{16060}***1367.3*** *8*
(†$_\gamma$0.26 *7*) $I^{(1)}$=*55.4*, $I^{(2)}$=*48.4*, ħω=*0.704*

B **17690** *2*, (39⁻) γ_{16260}***1430***

E **18098** *3*, (40⁺) γ_{16733}***1365***

H **18147.0** *20*, (40⁺) γ_{16802}***1345.1*** *9*
(†$_\gamma$0.26 *7*)

F **18877.6** *20*, (41⁻) γ_{17428}***1450*** *1*
(†$_\gamma$<0.16) $I^{(1)}$=*54.9*, $I^{(2)}$=*47.1*, ħω=*0.746*

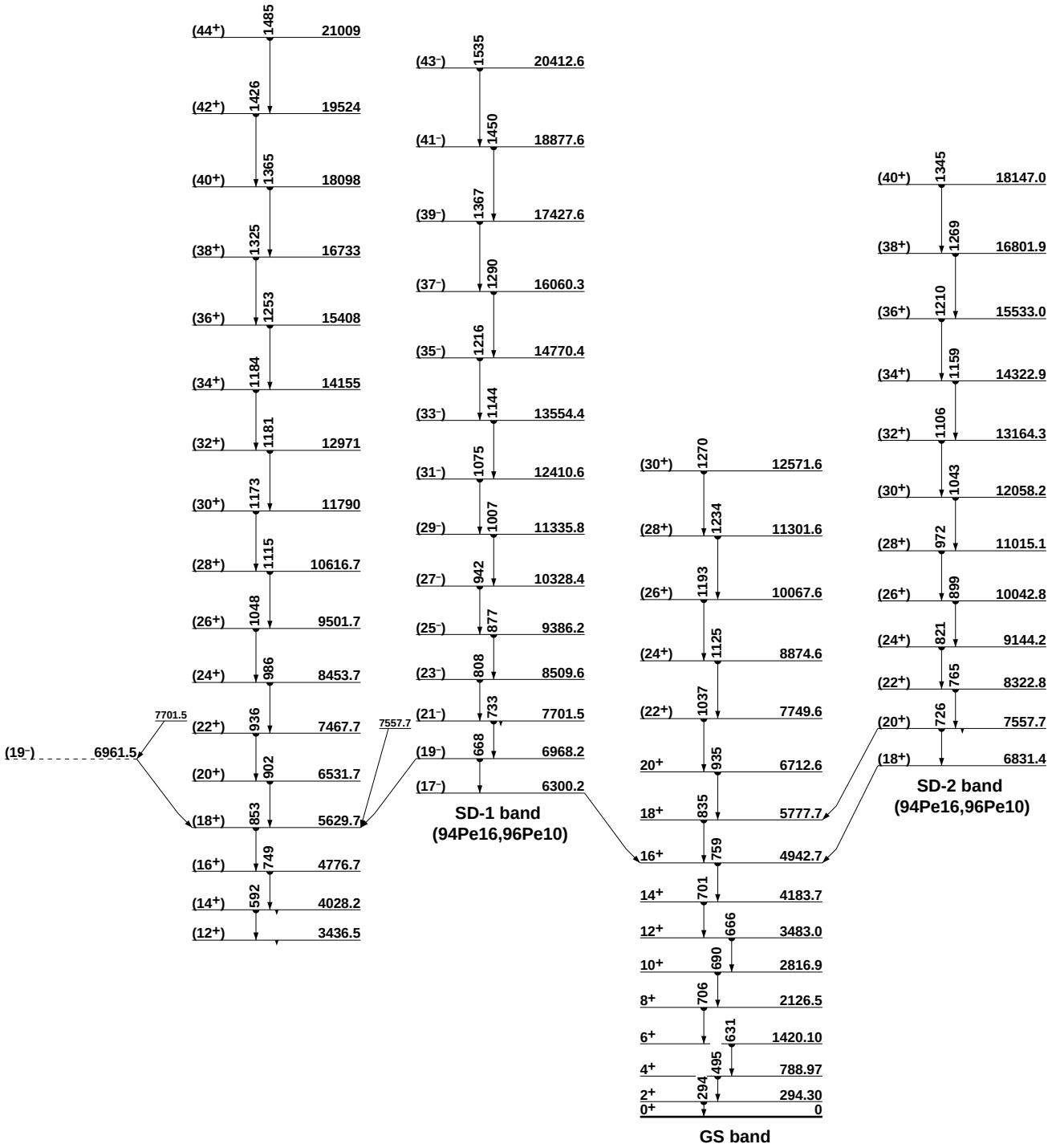
B **19208** *3*, (41⁻) γ_{17690}***1518***

E **19524** *3*, (42⁺) γ_{18098}***1426***

F **20412.6** *25*, (43⁻) γ_{18878}***1535***

B **20812** *3*, (43⁻) γ_{19208}***1604***

E **21009** *3*, (44⁺) γ_{19524}***1485***


(44+) 21009
1485
(42+) 19524
1426
(40+) 18098
1365
(38+) 16733
1325
(36+) 15408
1253
(34+) 14155
1184
(32+) 12971
1181
(30+) 11790
1173
(28+) 10616.7
1115
(26+) 9501.7
1048
(24+) 8453.7
986
(22+) 7467.7
936
(20+) 6531.7
902
(18+) 5629.7
853
(16+) 4776.7
749
(14+) 4028.2
592
(12+) 3436.5
(19−) 6961.5
7701.5
7557.7
(43−) 20412.6
1535
(41−) 18877.6
1450
(39−) 17427.6
1367
(37−) 16060.3
1290
(35−) 14770.4
1216
(33−) 13554.4
1144
(31−) 12410.6
1075
(29−) 11335.8
1007
(27−) 10328.4
942
(25−) 9386.2
877
(23−) 8509.6
808
(21−) 7701.5
733
(19−) 6968.2
668
(17−) 6300.2
SD-1 band
(94Pe16,96Pe10)
(30+) 12571.6
1270
(28+) 11301.6
1234
(26+) 10067.6
1193
(24+) 8874.6
1125
(22+) 7749.6
1037
20+ 6712.6
935
18+ 5777.7
835
16+ 4942.7
759
14+ 4183.7
701
12+ 3483.0
666
10+ 2816.9
690
8+ 2126.5
706
6+ 1420.10
631
4+ 788.97
495
2+ 294.30
294
0+ 0
GS band
(40+) 18147.0
1345
(38+) 16801.9
1269
(36+) 15533.0
1210
(34+) 14322.9
1159
(32+) 13164.3
1106
(30+) 12058.2
1043
(28+) 11015.1
972
(26+) 10042.8
899
(24+) 9144.2
821
(22+) 8322.8
765
(20+) 7557.7
726
(18+) 6831.4
SD-2 band
(94Pe16,96Pe10)

$^{134}_{60}$Nd